C.—MANGANESE, CHROME ORE, MAGNESITE, IRON ORE, MICA, COPPER, ASBESTOS AND CORUNDUM.

I. Manganese.

Manganese mining was very slack during the year and operations were carried on only on 3 blocks as against 7 in the previous year. The total quantity of ore mined during 1913-14 was 13,944 tons and the quantity exported 5,253 tons. The royalty paid was Rs. 1,461-8-0.

The corresponding figures for the previous year were :—

Ore mined	...	...	...	...	23,332 tons
Ore exported	...	...	...	...	36,877 ,,
Royalty	...	...	...	...	Rs. 16,448-12-0

The following statement shows the quantities collected and sold during 1913 and the first six months of 1914 :—

NAME OF LESSEE OR LICENSEE	Capital	1912 Long tons		1913 Long tons		1914 January to June Long tons		Blocks worked Nos. of licenses
		Collected	Sold	Collected	Sold	Collected	Sold	
1. The Workington Iron and Steel Co., Ld. ...	£150,000	23,380	22,511	10,470	23,742	8,808	214	1 & 2
2. Mr. A. Voigt ...	.....	1,419	1,268	...	256	...	...	116
3. Mr. C. Jambon ...	.....	130	...	31	...	150	...	153
Total ...	.....	24,929	23,779	10,501	23,998	8,958	214	

Work was confined to the Kumsi and Shankargudda properties of the Workington Company. Holmes Block and Python Block at Kumsi have continued to open up satisfactorily. A deep cutting has now been carried through the former from the lower tram line level which will enable a larger quantity of ore to be excavated and handled and the Python Block has been connected by a tram line of about a mile in length with Holmes Block. The discoveries at Shankargudda which were referred to last year continue to show good developments and a large quantity of ore awaits transport. The Company have applied for permission to construct a tram line from here to Shirgere, but sanction for this has not been obtained and until the line is constructed there is no hope of getting away any considerable part of the output.

II. Chrome Ore.

There has been some renewed activity in connection with this mineral and 15 licenses were current at the close of the year as against 9 during the previous year. Of these licenses, 13 are in the Mysore District and 2 in the Hassan District.

The quantity of ore collected during the year was 2,144 tons and the quantity exported 1,204 tons; the royalty payable on the ore exported is Rs. 446-4-0. There was no output or removal during the previous year.

Work was started afresh on the large open working near Shinduvalli, but was ordered to be stopped as the ground was not considered to be safe. Arrangements are being made to start underground work. The ore, which is of good quality, occurs in a series of lenses and systematic work will probably lead to the discovery of further supplies. In the Hassan District near Arsikere and Tiptur, there are large quantities of comparatively low grade ore and attempts are now being made to find a market for these.

The following statement shows the output for the year 1913 and the first six months of 1914 :—

NAME OF LICENSEE	NUMBER OF LICENSE	DISTRICT	OUTPUT		
			1912	1913	1914 January to June
			Tons.	Tons.	Tons.
Mr. J. Burr	337 & 381	Mysore ... Hassan ...	...	588	1,150
Mr. V. Manickavelu Mudaliar ...	402 & 403	Mysore ...	...	826	550
		Total ...	...	1,414	2,060

III. MAGNESITE.

Six licenses were current for magnesite (and chrome) against five in the previous year. On some of these blocks a good deal of work has been done by the Tata Iron and Steel Company and 2,112 tons of magnesite are reported to have been excavated. Some good veins of magnesite have been exposed and there are prospects of its being utilized for the preparation of burnt magnesite and magnesite bricks in connection with the Tata Iron and Steel Works. A scheme of work has been outlined and experiments are being made in the preparation of bricks from the Mysore material.

The following statement shows the output for the year 1913 and the first six months of 1914 :—

NAME OF LICENSEE	NUMBER OF LICENSE	DISTRICT	OUTPUT		
			1912	1913	1914 January to June
			Tons.	Tons.	Tons.
The Tata Iron and Steel Works, Ltd.	385, 386, 387, 388, 389, 397 and 401.	Mysore ...	...	2,112	1,281
		Total ...	...	2,112	1,281

IV. IRON ORE.

Six prospecting licenses and one exploring license in the Bababudan Hills were current up to the end of June 1914. A certain amount of exploratory and examination work has been done, but none of the deposits have been opened up and the work has added little, if anything, to the results already obtained departmentally. An extended inspection of the ground was made during the year and some large samples have been taken by the department for further practical investigation. An interesting series of iron ores in the neighbourhood of Gungur and Ubrani was mapped and examined during the course of survey work. An inspection of some of these showed them to be of comparatively low grade, but further work has resulted in the discovery of better ores running from 50 to 55 per cent of iron. A number of samples have been taken for analyses and until the results of these are known it is not possible to estimate the value of the finds or whether prospecting is desirable.

V. MICA.

Four prospecting licenses were current at the close of the year against six at the close of

the previous year. Of these four licenses, two were in the Mysore District, one in the Hassan District and one in the Chitaldrug District. The principal producer continues to be the Kabbur Mine in the Hole-Narsipur Taluk in the Hassan District from which were exported to England 3,547 lbs. of clean mica as against 2,875 lbs. in the previous year. The report from England in regard to the sale value of the mica exported is awaited for the purpose of assessing the royalty payable on the ore. In the Mundur Block in the Yedatore Taluk a small quantity of 20 lbs. of clean mica was obtained but has not been exported.

The following statement shows the output for the year 1913 and the first six months of 1914 :—

NAME OF LICENSEE	NAME AND NUMBER OF BLOCK	OUTPUT		
		1912	1913	1914 January to June
		lbs.	lbs.	lbs.
Mr. T. Chinnasamy Iyer	Mundoor-346	152	20	...
Do	Kabbur-350	4,910	1,000	5,574
Total ...	...	5,062	1,020	5,574

VI. Copper.

Two prospecting licenses were issued for copper ore of which one was for a block in the Mysore District and the other for one in the Chitaldrug District. Five tons of copper ore are reported to have been extracted from the block in the Mysore District. An inspection of this find was made, but the indications do not disclose any well-marked vein or body of ore. The richer portions are due to superficial segregation from a decomposed rock (probably a dyke) which is impregnated with a small quantity of copper. Sufficient work has not been done at present to determine whether any considerable body of payable ore exists.

VII. Asbestos.

From the Kabbur Mine in the Hole-Narsipur Taluk, Hassan District, a quantity of 10,788 lbs. of asbestos is reported to have been exported during the year under report and realized a net sum of Rs. 165-13-0 on which a royalty of Rs. 8-4-0 has been realized.

The following statement shows the output for the year 1913 and the first six months of 1914 :—

NAME OF LICENSEE	NAME AND NUMBER OF BLOCK	OUTPUT		
		1912	1913	1914 January to June
		lbs.	lbs.	lbs.
T. Chinnasamy Iyer	Kabbur-350	...	...	10,788

VIII. Corundum.

The number of licenses for collecting corundum that were current at the close of the year under report was 25 against 30 in the previous year. The taluks from which the mineral was mostly obtained during the year were Koratagere, Maddagiri, Sidlaghatta, Pavagada and Dodballapur and some small quantities were also produced from the taluks of Gubbi, Kunigal and Tumkur. The quantity exported during the year as compared with previous years is shown below :—

Year	Number of licenses	Quantity exported	Royalty
		cwts.	Rs.
1910-11	... 2	11	6
1911-12	... 16	1,253	668
1912-13	... 30	4,060	2,230
1913-14	... 25	3,330	1,773

The following statement gives the output for the calendar year from the various taluks:—

NAME OF LICENSEE	TALUK	OUTPUT					
		1912		1913		1914 January to June	
		cwts.	lbs.	cwts.	lbs.	cwts.	lbs.
1. V. Sivaramiah Chetty ...	Chamrajnagar ...	6	87	.....		.....	
2. M. Balaji Rao	Malvalli ...	38	4	.....		.....	
3. Katte Ramiah and Abdul Shukur.	Maddagiri ...	425	0	1,100	50	378	44
4. Katte Venkataramiah ...	Koratagere ...	1,705	90	1,851	88	151	88
5. Abdul Gaffur Saheb ...	Sidlaghatta ...	295	14	.....		.....	
6. Shanbhog Hanumanthappa...	Tumkur ...	87	94	67	42	.....	
7. B. Mohadeen Saheb ...	Sidlaghatta ...	317	34	285	76	151	40
8. Narayanjee Vindravan and K. Heerachand.	Dodballapur ...	.....		94	97	80	106
9. K. Heerachand... ...	Kunigal ...	.....		34	17	.....	
10. Narayanjee Vindravan ...	Gubbi ...	.....		45	60	10	19
11. T. Abdulla Saheb ...	Pavagada ...	.....		201	28	.....	
12. Dosa Sheriff Sait ...	Arsikere ...	.....		341	58	.....	
	Total ...	2,875	99	4,022	68	772	73

D.—INSPECTION OF MINES.

I. General.

I continued to be in charge of the Inspection of Mines during the year.

Chief Inspector of Mines.

Seven visits covering 39 days were made to the Kolar Gold Field in connection with accident enquiries and general inspection. Inspections were also made of the Jalagargundi Mine, the gold prospecting blocks in the neighbourhood of Honnali, the Workington's property at Shimoga, the prospecting work for Iron Ore on the Bababudans, and the chrome workings at Shinduvalli.

Inspector of Mines.

During the year under report Mr. R. Bocquet, who had been on furlough, returned on the 29th November 1913 and assumed charge of the office and duties of the Inspector of Mines, and, since that date, has been in residence on the Kolar Gold Field.

Deputy Inspector of Mines.

Mr. L. H. Beckwith, who continued to officiate as Inspector of Mines until relieved of his officiating appointment on the above date, was also in residence on the Kolar Gold Field throughout the year with the exception of 18 days' privilege leave of absence from the 13th to 30th May 1914 (both days inclusive).

As usual all the fatal and the more important serious accidents were personally enquired into and, the localities in which they occurred, invariably inspected. Mr. Suryanarayana Rao, Mining Assistant, rendered valuable assistance and enquired into the majority of the less important accidents. He was absent on privilege leave for one month and three days with effect from the 9th July 1913 and again for ten days from the 27th May 1914.

In addition to this work, as far as time permitted, systematic inspection of the underground workings was carried out by the Inspectors of Mines, all working places being visited during the year, the majority of them more than once. The routine work of the office was